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New World Paradigm, LTD.

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August 26, 1998 RECEIVED

Office of the Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

AUG 27 1998
FCC MAIL ROOM

Dear Secretary Salas:

Pursuant to 47 C.F.R. § 1.1206(b), this letter provides copies of a Written Ex Parte Presentation relating to CS Docket No. 98-120(FCC 98-153) and CC Docket No. 98-147(FCC 98-188) for inclusion in the public record of the proceedings. Two copies of the Written Presentation are provided for each docket.

Sincerely,



Stephen N. Brown
Director of Public & Technology Policy
Attachments (4)

No. of Copies rec'd 0+3
List A B C D E

This is a copy of a Written Ex Parte Presentation relating to CS Docket No. 98-120(FCC-98-153) and CC Docket No. 98-147(FCC 98-188)

NWP Ltd., Presentation to
FCC Technology Staff

Information Capacity

- Radiative
 - Spectrum Limits
 - Power Limits
- Wired
 - Single path emulates limits (old cable concept)
 - Multi-path: Addressable; Capacity without Limits

Signal Design

- Radiated
 - Conserve Spectrum → Rationing Signal Space
 - Master Signal (digital) most effectively occupying signal space
- Wired
 - Single path emulates limits
 - Multi-path: Digital Addressable; Unlimited Signal Space

In Digital: Coding → Arbitrarily Low Delivered Error Rates.

ERGO: Fully digital channel, addressable, multiple party (two-way)

Cable

- Fully digital cable can deliver old **analog as well digital** signal from digital carriage.
- Diverges from "antenna" concept of cable

UVICS

- Any Format, Any Protocol
- Dynamic System
- Dynamic Packet Data
- Dynamic Compression
- Can Interpret Analog or Digital Signals

TV

- CRT Concept
 - Scan Lines
 - Synch
- UVICS Concept
 - Pixel Array Map
 - Clock + Data

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THE KHAM SIN CABLE SYSTEM:

Integrates the Cable Distribution Network and the Local Telephone Loop Into A Digital National Telecommunications Infrastructure

BANDWIDTH:

Dual 622 Mbps - 2-Paths - Upstream And Downstream Entirely Digital -Allowing Any Video, Voice And Data To Be Handled On One Wire

SIGNAL TO NOISE RATIO:

Sustains A Designed Value Of Signal To Noise Ratio From Source To Viewer , Listener And Consumer Creates A Vast Market For Passive Information Services

ARCHITECTURE TYPE:

Ip Addressable Catv Joins The Worldwide Wired Telecommunications Networks

INTERFERENCE LEVELS:

None - No Xtlk, No Emi, No Cable Transmission Losses

TRANSPORT METHOD:

Sdh/Sonet Packet Protocol

CABLE FACTS:

Long Lived Design Life Based On New Polymers And New Methods Of Fabrication In Manufacturing

INPUT MATERIALS AND COSTS:

Electric Conductors And Cutting Edge Fiber Optics Materials Are Inexpensive And Readily Available In Domestic Market

ELECTRIC POWER REQUIREMENTS:

Very Low - System Has Battery Backup To Survive Power Failures

DESIGN RELIABILITY:

Very High -System Outage Less Than 10 Seconds Per Year

NEW CONSTRUCTION REQUIRED:

Yes Thousands Of New Jobs In Installation And In Passive Services Market

CAPITAL COSTS:

Expected To Be Low Given Current Cost Of Long Term Debt And Equity

FUNDAMENTAL CHANGE IN THE TELEVISION INDUSTRY:

The Art And Analytics Of Sending A Television Signal From The Studio To The Consumer
Are Changed Because The Khamsin System Delivers Unlimited Numbers Of Channels

IMPACT ON MUST CARRY (I):

The Spectrum Rationing Policy Of The
Radiated Spectrum Does Not Apply In The
Wired World Cable Companies Will Be Able
To Simulacast Without Blocking Current Or
Forthcoming Channels

IMPACT ON SIGNAL DEGRADATION CONCERNS:

Solved By Khamsin System

IMPACT ON MUST CARRY (II):

An On Schedule Return Of Spectrum To The
Public Trust

IMPACT ON CABLE BUILD OUT SCHEDULES:

A Rethinking And Likely Delay Of Current Plans
To Assess This New Technology

IMPACT ON DISSEMINATION OF INFORMATION:

Promotes The Public Access To Diverse
Sources Of Information

ACHIEVING LOW COST ACCESS:

Multiplicity Of Uses And Sources Drives Down Average Cost Per Information Bit

ADDRESSABLE CHANNELS:

Consumer Like Internet Users, Pick A Channel
Address They Wish To View More Capacity Is
Available Because Companies No Longer
Have To Deliver All Channels At The Same
Time To Consumers

CHANNEL WIDTH NO LONGER FIXED AT 6 MHZ:

Traditional Width Based On The Constraints Of
The Radiated Spectrum In The Wired Network
Channel Width Can Vary Almost At Will
According To The Designs Of The Studio

STATIONS CONCERNS ABOUT LIMITS ON RADIATED POWER DIMINISH:

In The Wired Digital Network The Television
Industry No Longer Faces A Tradeoff Between
Coverage And Interference, Reduced Power
Levels And Competitive Disadvantage

DTV TO DTV ADJACENT CHANNEL INTERFERENCE BYPASSED:

Offering Addressable Channels Gives All
Stations The Option Of Piping Their Services To
A Video Server Delivering The Highest Quality
Resolution

NONCOMMERCIAL TELEVISION:

Video On Demand Easily Achievable For
Education And Other Beneficial Uses

**OTHER EFFECTS:IMPACT ON RECEIVERS AND SET
TOP BOXES:**

A New Technology - Uvics - Universal Visual Image Communication System Which Allows
Software Rather Than Hardware To Direct The Production And Reconstruction Of Visual
Images

**A NEW WAY OF REPRESENTING A
VISUAL IMAGE:**

Increased Capacity Achieved By Digital
Transmission Enables Pixel Arrays To Be
Addressed By Coding Which Accompanies
The Specific Television Program Watched By
The Consumer

STANDARDS SETTING:

Aspect Ratios Become A Variable And Are No
Longer Constrained To 1 Of 18 Atsc Codes

**ACCESS-CONCERNS HAVE A NEW
FOCUS:**

Video Servers And Access To Them Acquire A
New Importance

**SIGNAL DESIGN IN RADIATED
SPECTRUM CHANGES:**

Signal Strategy Reorganized Around An Sdh
Like System, Where A Single Master Transmitter
Provides All Channels In An Area

**WIRELESS SPECTRUM OPEN TO MORE
USES:**

Additional Public Safety Uses And New
Entrepreneurial Uses Of Radiated Spectrum
Become Available

IMPACT ON THE LOCAL LOOP:

Superior To Xdsl Technology

NATIONAL STANDARDS ON LOOP CONDITIONING:

No Longer Needed Regulatory Policy Should
Not Increase The Longevity Of Outdated Plant

CENTRAL OFFICE CONCEPT CHANGES:

No Dial Tones, No Busy Signals, Nonblocking
Switches, Number Portability And No Number
Shortage

CIRCUIT SWITCHING ENDS:

Voice Treated Like Data In An Addressable Ip
Type Network

MUCH IMPROVED INTERNET ACCESS:

Always On At T1 And T3 Speeds If Desired

IMPACT ON COMMUNITY ORGANIZATION:

Potentially Better Informed Neighborhoods And
More Commerce